

- Energy and Flux of neutrinos from various sources.
 - The SUN ! below 0.5 MeV $10^{11} cm^{-2} s^{-1}$
 at $\sim 3\text{-}14$ MeV $3 \times 10^6 cm^{-2} s^{-1}$
 - Cosmic rays hitting the atmosphere
 at 1 GeV $\sim 5000 m^{-2} s^{-1}$
 - From radioactive decays in the Earth
 $10^6 - 10^7 cm^{-2} s^{-1} < 3$ MeV from U/Th decays.
 - SuperNova neutrinos. 11 were seen in 1987 in two large detectors.
 - Microwave background neutrinos. Very cold 2.7° ! $300 cm^{-3}$
 Multiply by velocity to get flux.
 - Nuclear reactors. $10^{13} - 10^{15} cm^{-2} s^{-1} \leq 5$ MeV. Falls as
 $1/r^2$ with distance from reactor.
 - Accelerators. $5 \times 10^{-5}/m^2$ per proton ($E \sim 1$ GeV) at 1 km.